

Thesis abstract

An empirical analysis of the investment and profitability effects

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Asset pricing factors formed on the level of firm investment and profitability are shown to have significant *ex post* explanatory power in the cross-section of stock returns. Whilst asset pricing models incorporating these factors exhibit improved explanatory power in the cross-section of returns, conjecture exists as to the underlying drivers of the investment and profitability effects. This thesis contains three empirical asset pricing studies examining the investment and profitability effects, providing tests of the efficacy of these factors. The results presented consider the pervasiveness of these factors across global equity markets, as well as examining two key theoretical explanations for these anomalies: shocks to the discount rate, and state variables containing information on the future investment opportunity set.

The first empirical chapter examines whether asset pricing models that incorporate investment and profitability factors should be considered *ex ante* predictors of stock returns. The study focusses on the Australian stock market, as it is characterised by small, high-investing, and low-profitability firms. This subset of the investment opportunity set has proven problematic for US investment and profitability factors. The results in this chapter demonstrate that the investment factor is persistently and pervasively related to Australian stock returns,

whilst the profitability factor is not. These results are robust to the choice of asset pricing model, as well as a battery of robustness tests.

The second empirical chapter examines the relationship between discount rates¹ and the returns attributable to portfolios formed on either investment or profitability. Theoretical explanations for the investment and profitability effects suggest that the level of discount rates, relative to macroeconomic conditions, drives the premium attributable to the investment and profitability factors. It is expected that the returns of high-investment and low-profitability stocks will experience greater changes as a result of shocks to the discount rate. The results in this chapter are supportive of these theoretical explanations, indicating the underlying market state is a significant factor in explaining the relationship between unexpected changes in the discount rate and the returns attributable to portfolios formed on investment and profitability.

The third empirical chapter examines whether the returns of investment and profitability hedge portfolios are explained by return dispersion. This assertion is tested on portfolio returns formed on stocks segre-

¹ Monetary policy shocks are used as a proxy for unexpected changes to the discount rate.

gated by region, as well as a global portfolio of stocks. The results of this chapter support the assertion that return dispersion explains future investment and profitability hedge portfolio returns across all regional and the global portfolios. The results demonstrate that the explanatory power of return dispersion relates to hedge portfolio returns up to twelve months in the future, indicating that return dispersion may be a proxy for a

state variable that captures the time-varying investment opportunity set.

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